


EXHIBIT C



mga research corporation

**SEATS INCORPORATED
WALL MOUNTED SEAT
FMVSS 202A DIMENSIONAL MEASUREMENTS
(PO#289976)**

TEST REPORT

MGA REPORT NO.: C21Q9-004.5
TEST(S) PERFORMED ON: February 22, 2021
TEST REFERENCE NUMBER(S): Q21128
PROCEDURE NUMBER: MGATP_202a_HPT
Last Revision Date: March 23, 2016
TEST LABORATORY: MGA Research Corporation
820 Suburban Park Drive
Greer, SC 29651
SUBMITTED TO: Brent McCarthy
Seats Incorporated
1515 Industrial Street
Reedsburg, WI 53959
REPORT DATE: March 11, 2021
MGA PERSONNEL: 
Josh Corneroli
Project Leader
Test Personnel
David Maier

* The results presented in this report relate only to the specified test items.

** This report shall not be reproduced except in full, without the written approval of the laboratory.

MGA Report No.: C21Q9-004.5
 Test Type: Dimensionals

Customer: Seats Incorporated
 Program: Wall Mounted Seat

Page 2 of 29

Test Specification

Sample was tested per FMVSS 4.2.1-.3 and 4.2.4.1-.2 with no deviations from the specification.

Equipment

The following instrumentation was used to perform this test. All equipment and data have been calibrated by a source traceable to the National Institute of Standards and Technology (NIST). Calibration certificates can be furnished upon request.

| Sensor ID Number | Data Type | Calibration Date | Calibration Due Date |
|------------------|--------------------|------------------|----------------------|
| 128 | J826 Oscar | 10/08/2020 | 10/08/2021 |
| TPM007 | Tape Measure | 09/25/2020 | 09/25/2021 |
| SC00232 | Digital Inclinator | 07/31/2020 | 07/31/2021 |
| SC00233 | CMM | 10/02/2020 | 10/02/2021 |
| SC00104 | Digital Calipers | 08/17/2020 | 08/17/2021 |
| SC00123 | Force Gauge | 07/30/2020 | 07/30/2021 |

Procedure/Method

The fixturing of the sample consisted of attaching the sample to the fixture and then bolting the fixture to a T-slot plate. MGA's SAE J826 H-Point manikin was used to perform all measurements.

Test Results

Photographs can be found in Appendix B. All data is traceable to the National Institute of Standards and technology (NIST).

| Test No. | Sample Desc. | Sample ID No. | Measured H-Point | | |
|----------|-------------------|---------------|--------------------------|------------------------|-------------------|
| | | | X [mm] (forward ref.) | Z [mm] (above ref.) | Torso Angle [Deg] |
| Q21128 | Wall Mounted Seat | #1 | 147.5 | 159.3 | 6.0° |

*Note: Measurements are relative to left-hand seat bottom cushion pivot

| Test No. | Sample Desc. | Sample ID No. | S4.2.1- Average Height [mm] (FMVSS Req't ≥ 800 in at least one position) | S4.2.3- Backset [mm] (FMVSS Req't < 55) |
|----------|-------------------|---------------|--|---|
| Q21128 | Wall Mounted Seat | #1 | 846 | 58.3 |

*Note: Backset only applies if headrest height is between 750-800 mm

| Test No. | Sample Desc. | Sample ID No. | S4.2.2- H/R Width [mm] (FMVSS Req't ≥ 170) | S4.2.4- Gaps-(Sphere) [mm] (FMVSS Req't < 60) | | |
|----------|-------------------|---------------|--|---|--------|-----|
| | | | | I/B | Center | O/B |
| | | | | G1 | G2 | G3 |
| Q21128 | Wall Mounted Seat | #1 | 345 | NA | NA | NA |

*Note: Sample Met requirements for FMVSS 202a Dimensional Measurements

MGA Report No.: C21Q9-004.5
 Test Type: Dimensionals

Customer: Seats Incorporated
 Program: Wall Mounted Seat

Page 3 of 29

Additional HR Measurements

| Test No. | Sample Desc. | Sample ID No. | Knee Angle [deg] | | | | | | Foot Angle [deg] | | | | | | Hip Angle [deg] | | |
|----------|-------------------|---------------|------------------|-----|-----|-----|-----|-----|------------------|-----|-----|-----|-----|-----|-----------------|----|----|
| | | | LH | | | RH | | | LH | | | RH | | | D1 | D2 | D3 |
| | | | D1 | D2 | D3 | D1 | D2 | D3 | D1 | D2 | D3 | D1 | D2 | D3 | | | |
| Q21128 | Wall Mounted Seat | #1 | 107 | 106 | 105 | 107 | 105 | 105 | 114 | 115 | 115 | 114 | 113 | 115 | 90 | 90 | 90 |

Additional test documentation can be found in the following appendices.

Appendix A Customer Test Request and Related Documents..... Page 4

Appendix B Test Data and Photographs Page 5

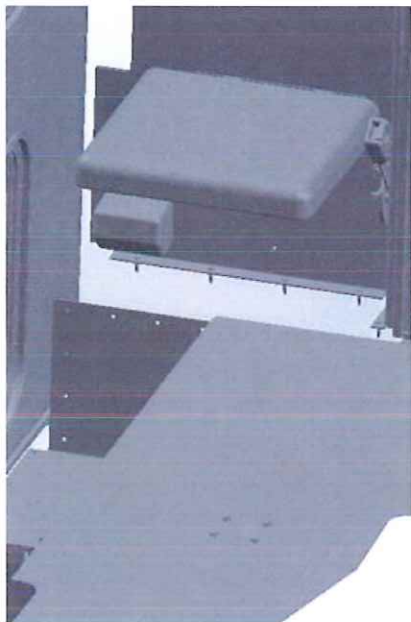
MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 4 of 29

Appendix A
Customer Test Request and Related Documents

The distance from the top of the seat cushion to the floor structure on the left side of the seat is 15.14". The right foot side is 26.21".

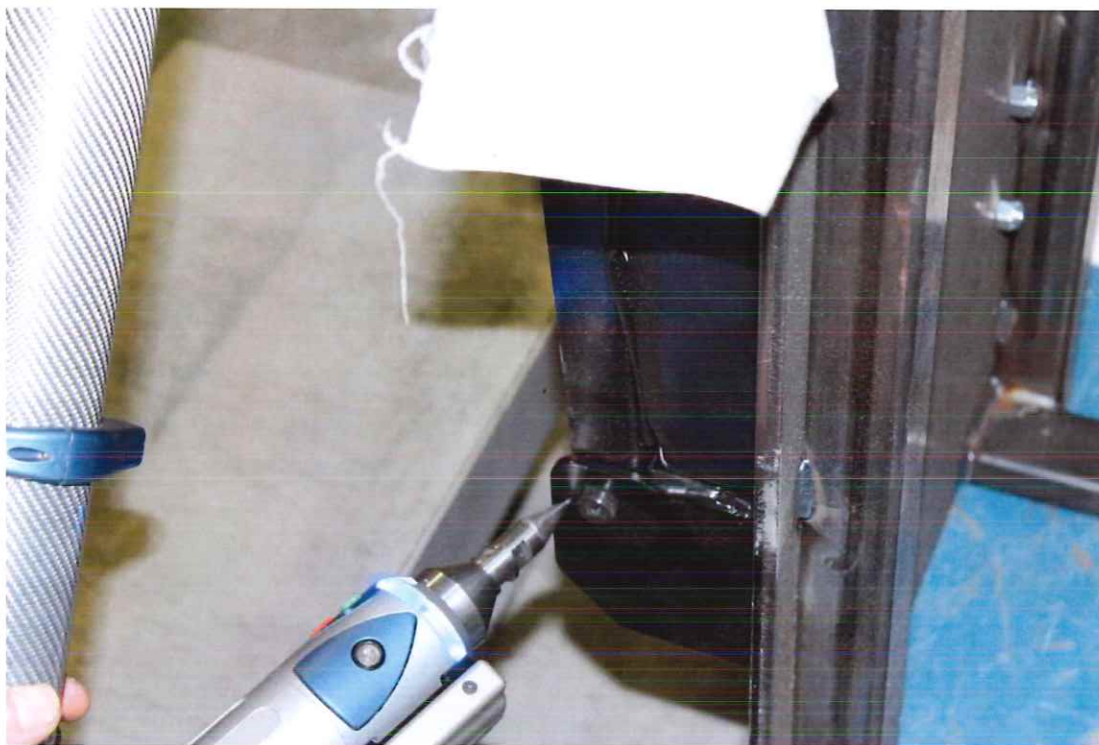


MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

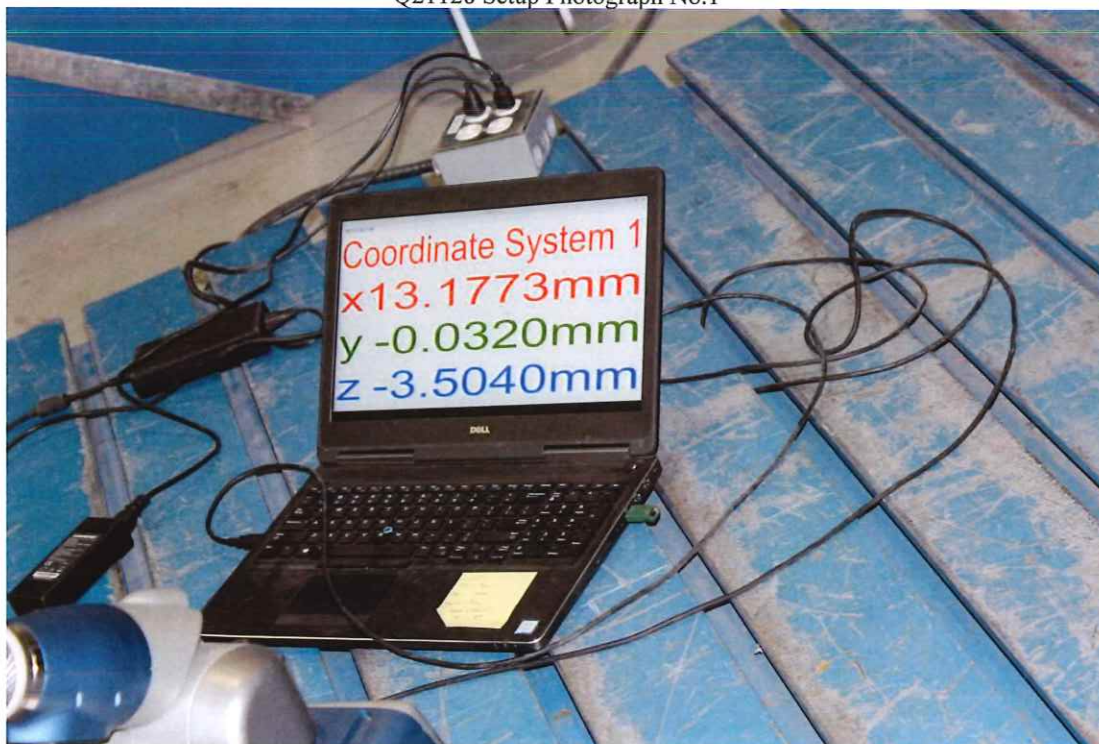
Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 5 of 29

Appendix B
Test Data and Photographs



Q21128 Setup Photograph No.1



Q21128 Setup Photograph No.2

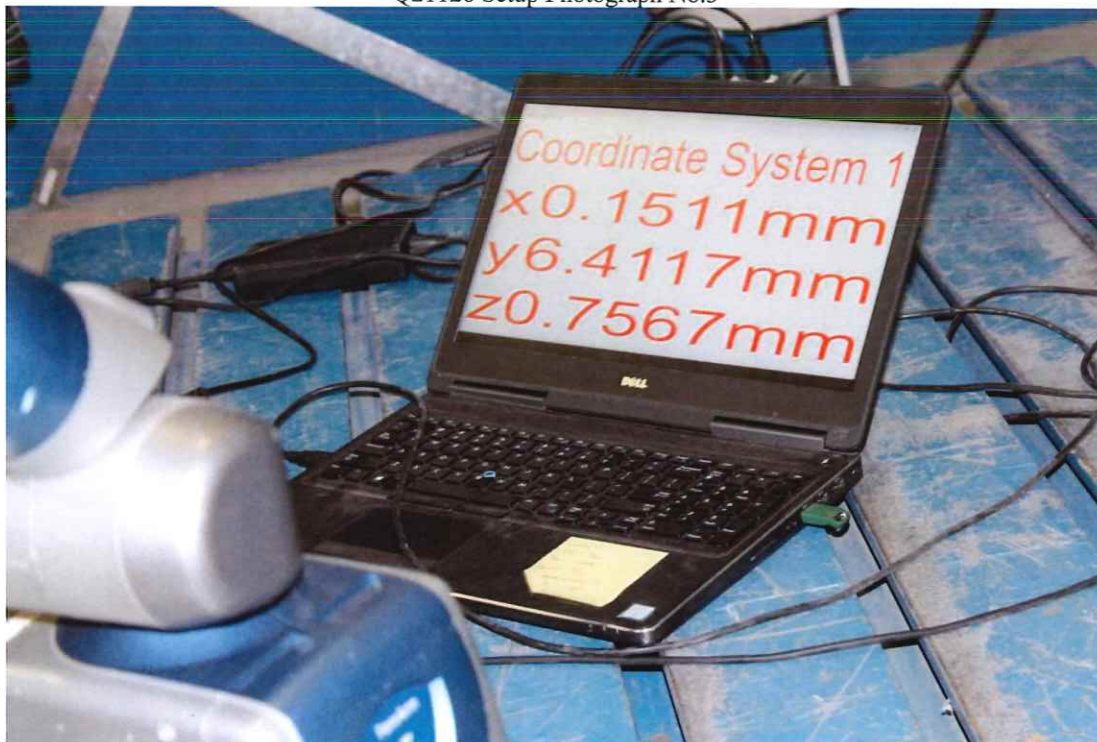
MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 6 of 29



Q21128 Setup Photograph No.3

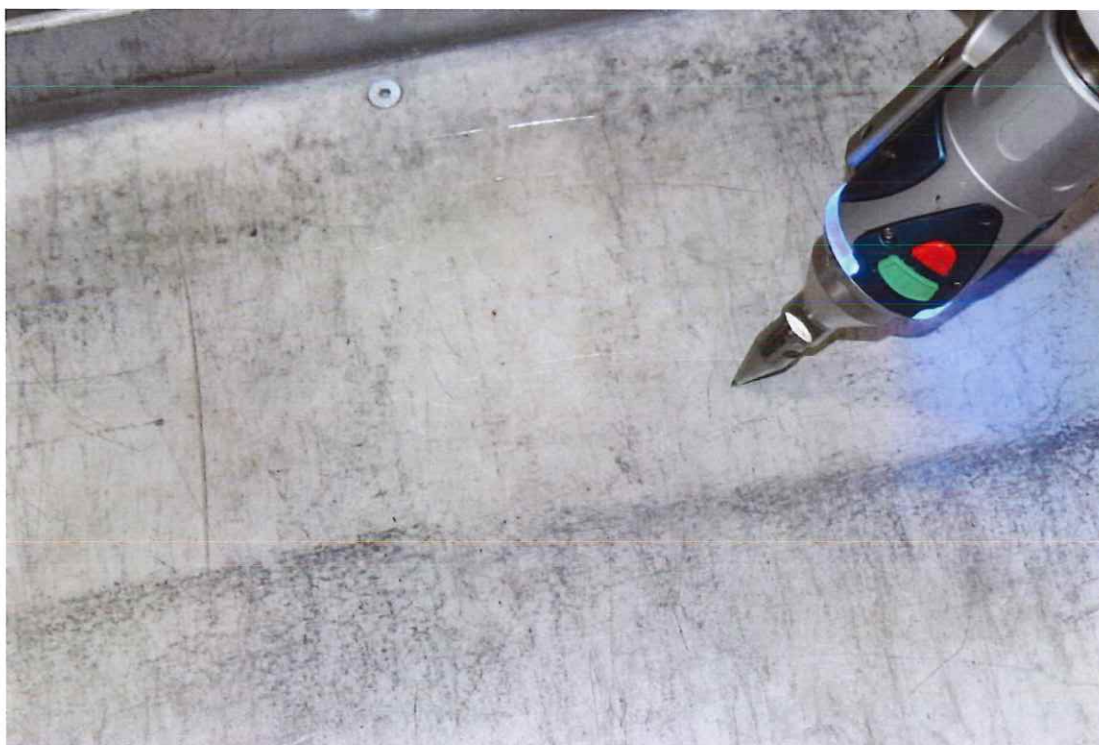


Q21128 Setup Photograph No.4

MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 7 of 29



Q21128 Setup Photograph No.5



Q21128 Setup Photograph No.6

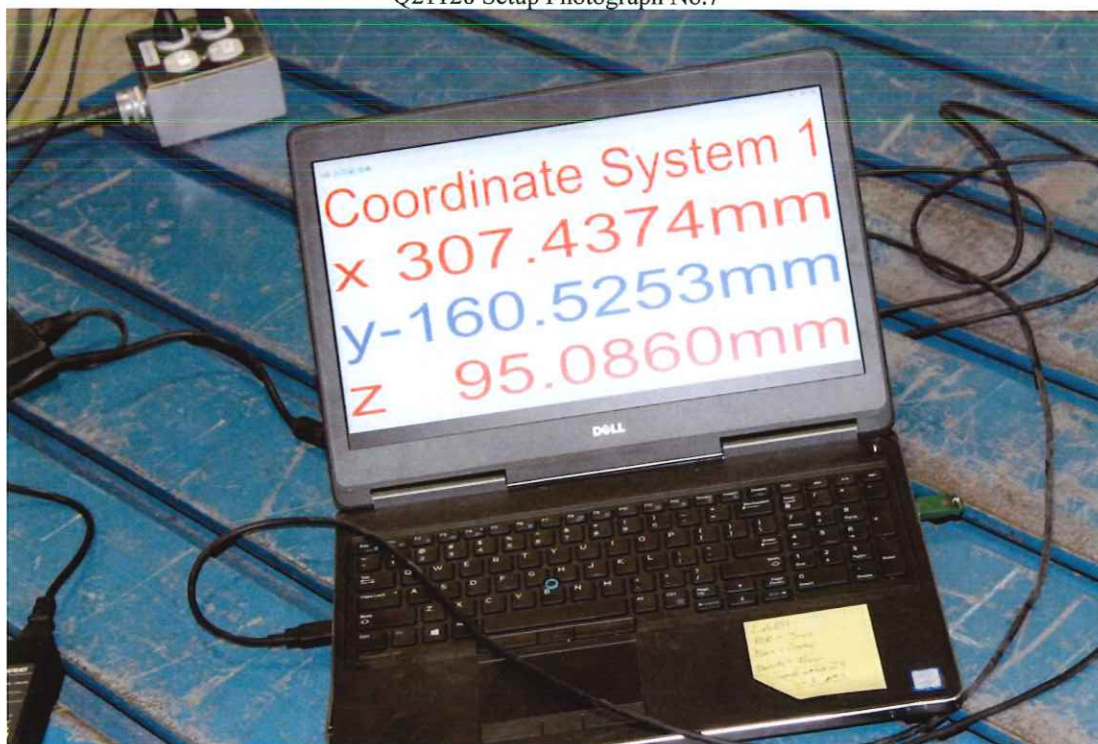
MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 8 of 29



Q21128 Setup Photograph No.7



Q21128 Setup Photograph No.8

MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 9 of 29



Q21128 Setup Photograph No.9

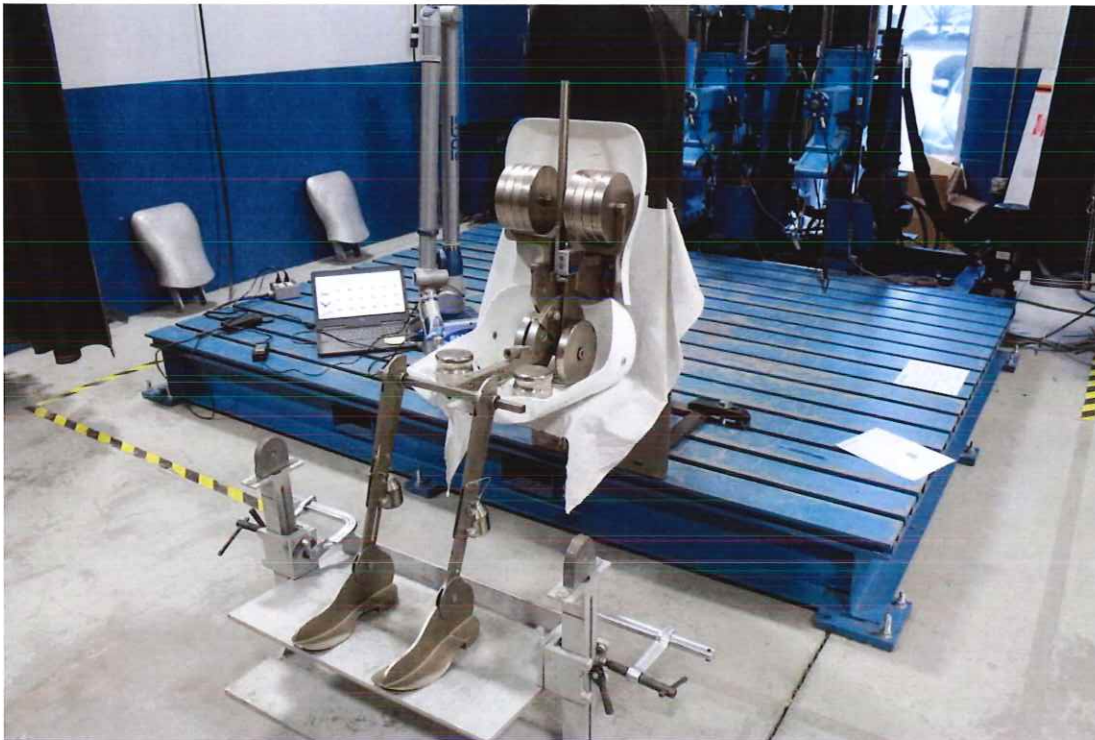


Q21128 Test Photograph No.1

MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 10 of 29



Q21128 Test Photograph No.2



Q21128 Test Photograph No.3

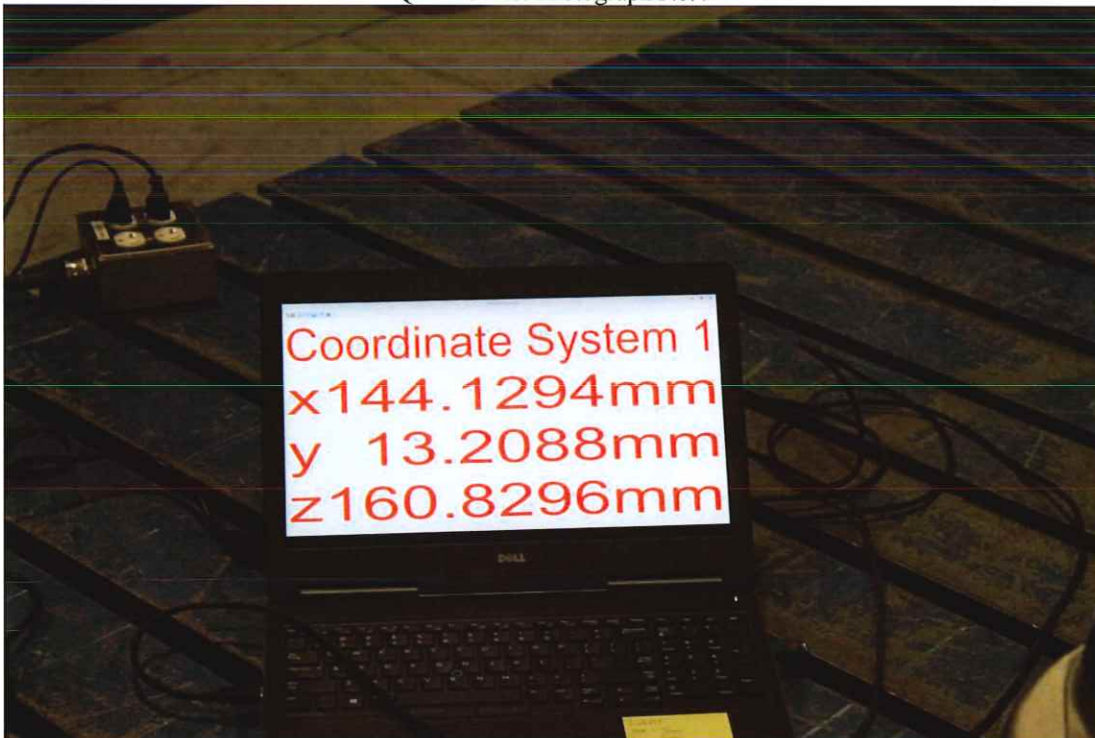
MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 11 of 29



Q21128 Test Photograph No.4



Q21128 Test Photograph No.5

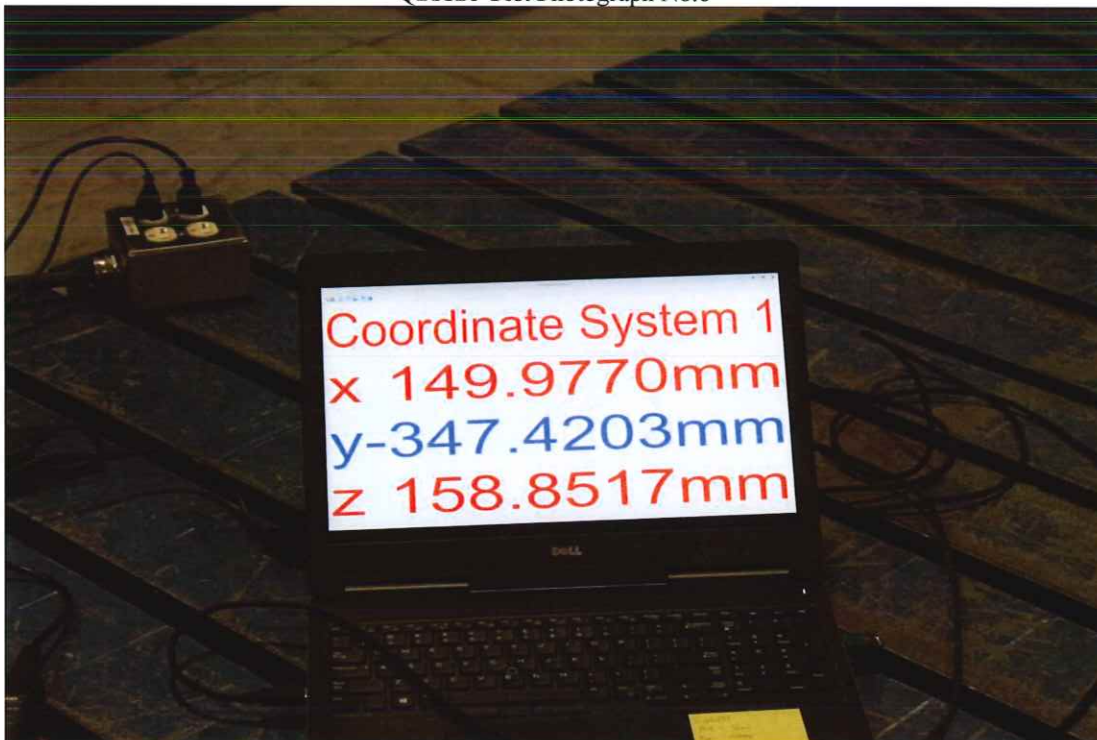
MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 12 of 29



Q21128 Test Photograph No.6

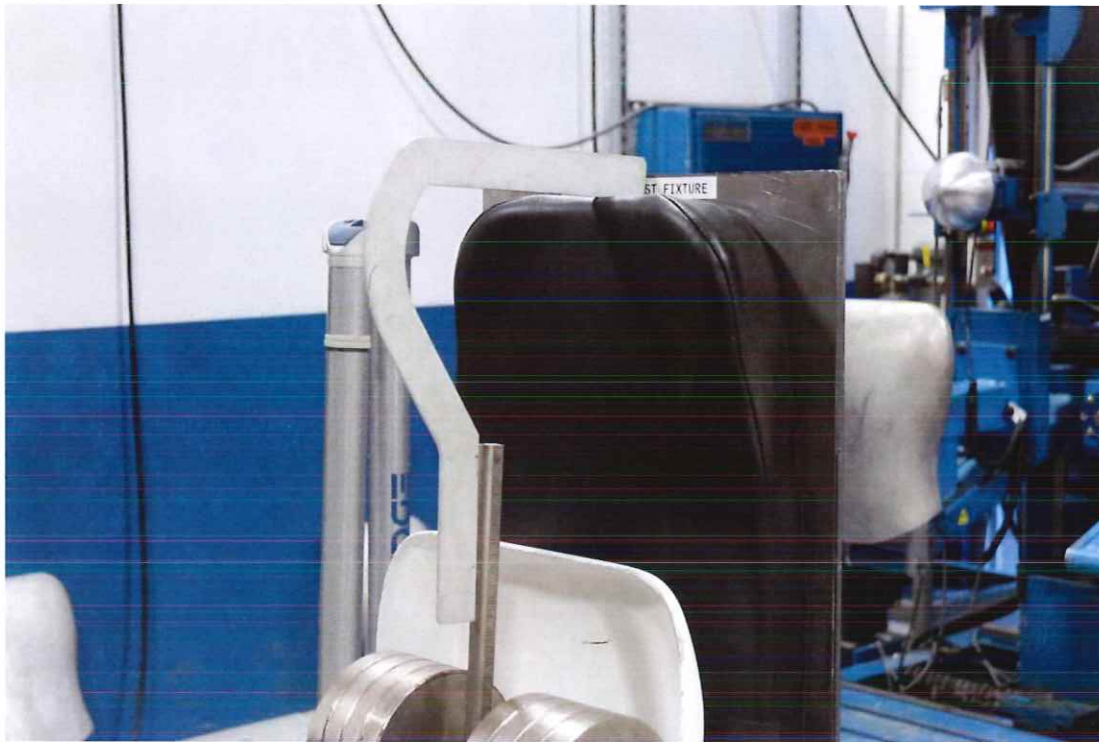


Q21128 Test Photograph No.7

MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 13 of 29



Q21128 Test Photograph No.8

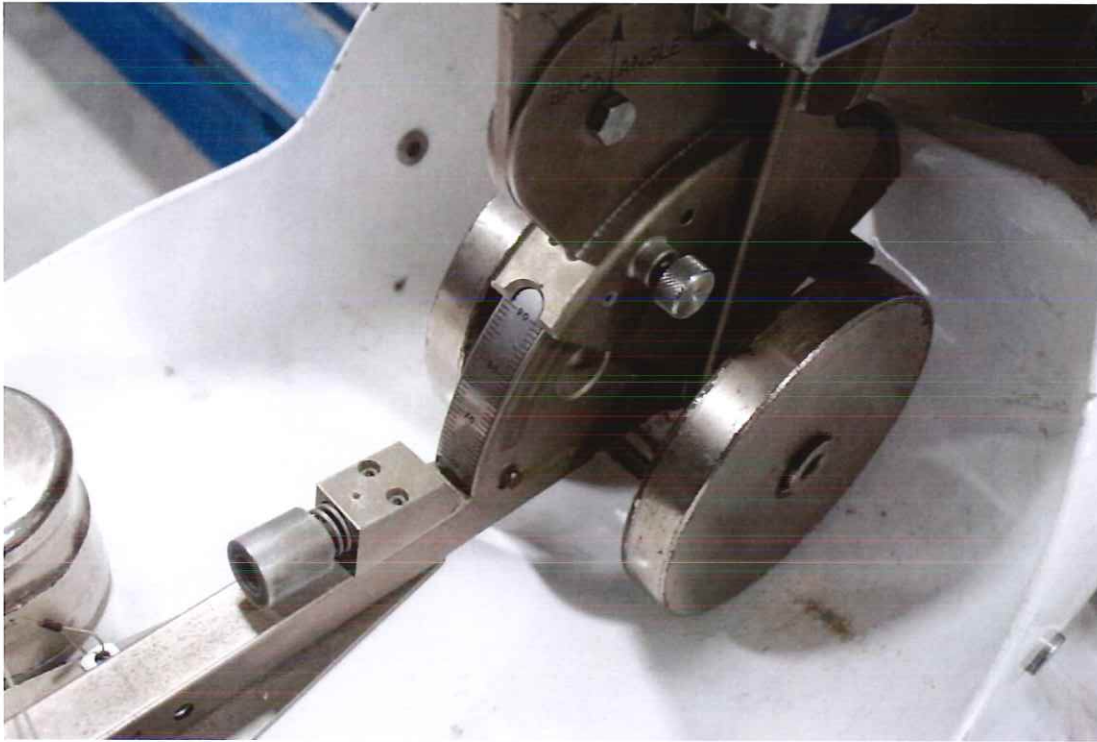


Q21128 Test Photograph No.9

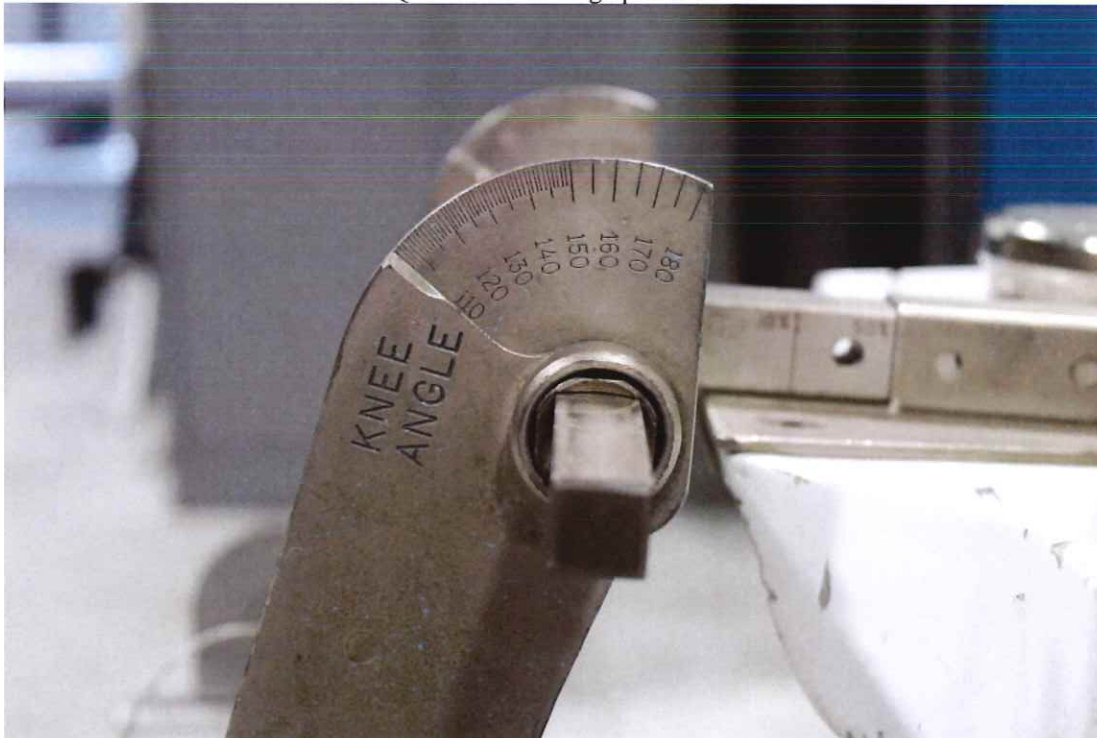
MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 14 of 29



Q21128 Test Photograph No.10



Q21128 Test Photograph No.11

MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 15 of 29



Q21128 Test Photograph No.12



Q21128 Test Photograph No.13

MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 16 of 29



Q21128 Test Photograph No.14

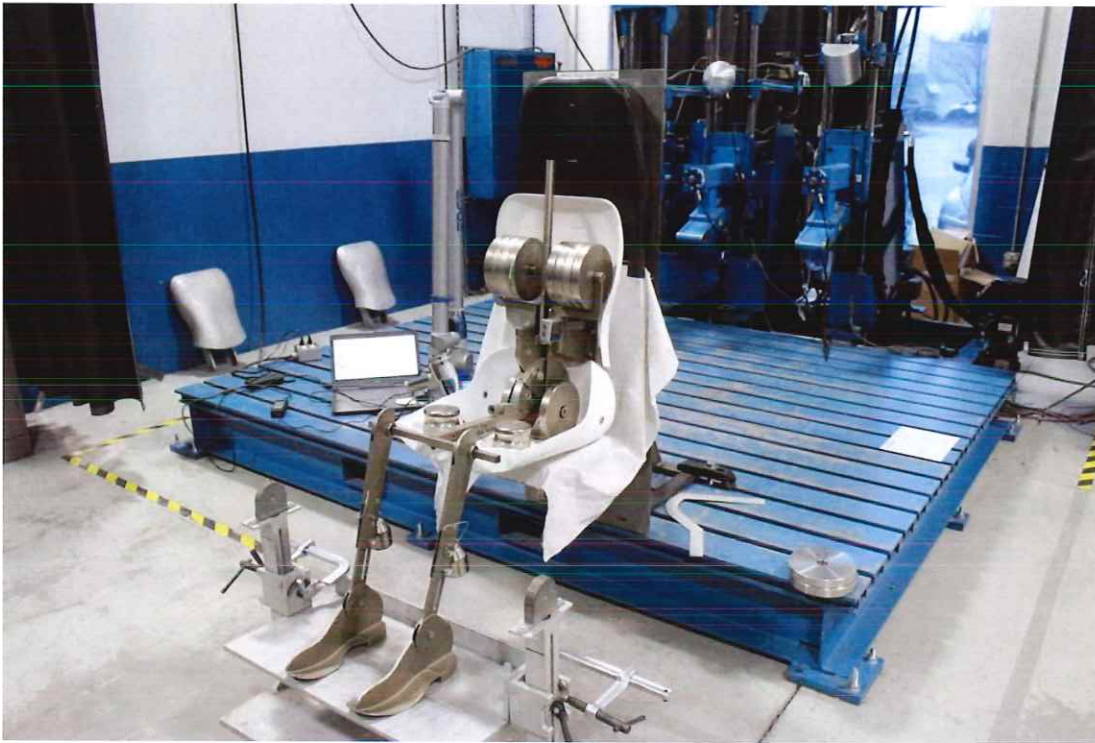


Q21128 Test Photograph No.15

MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 17 of 29



Q21128 Test Photograph No.16

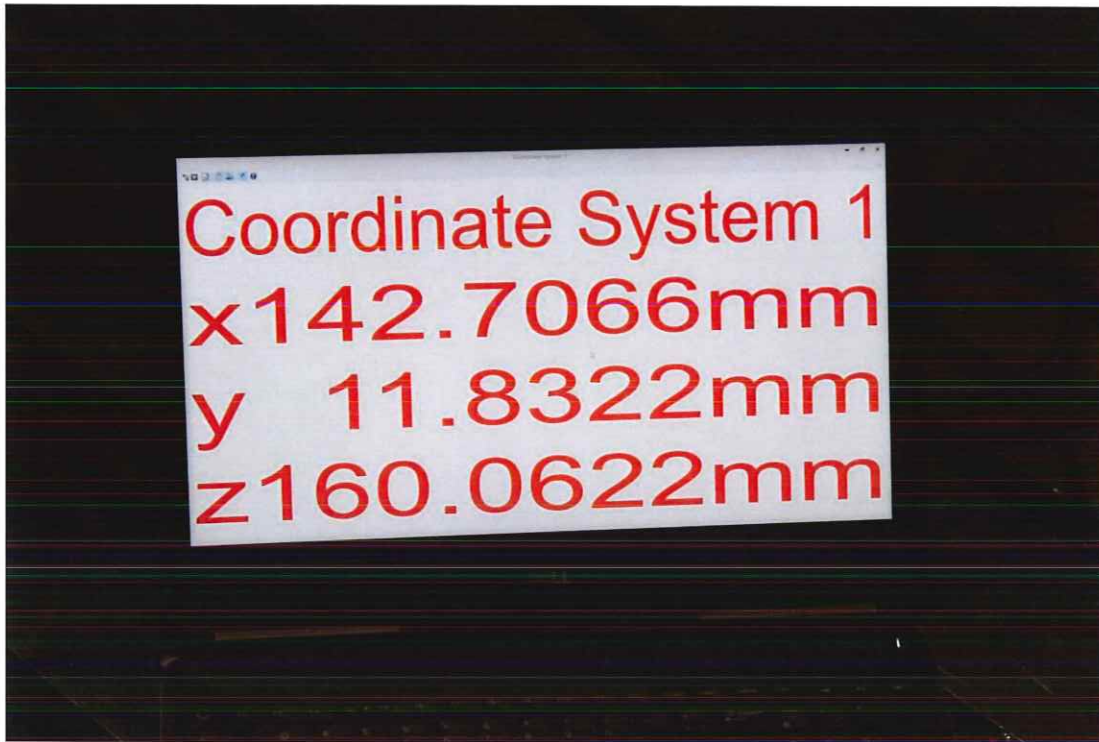


Q21128 Test Photograph No.17

MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 18 of 29



Q21128 Test Photograph No.18



Q21128 Test Photograph No.19

MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 19 of 29



Q21128 Test Photograph No.20

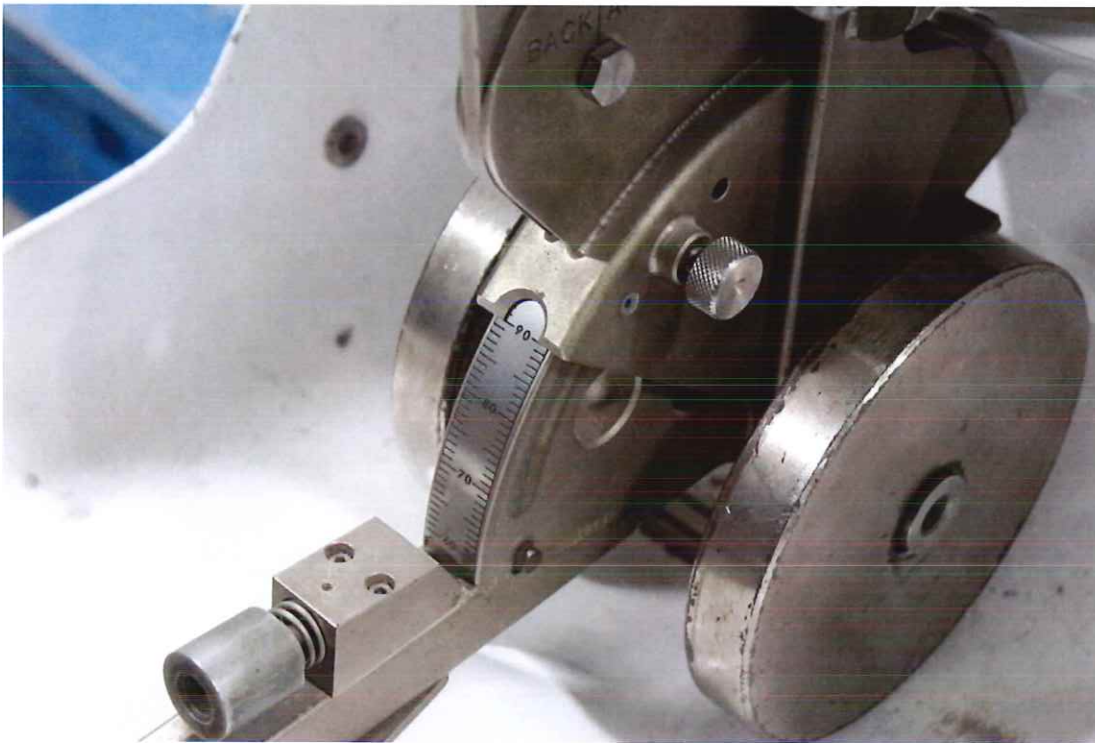


Q21128 Test Photograph No.21

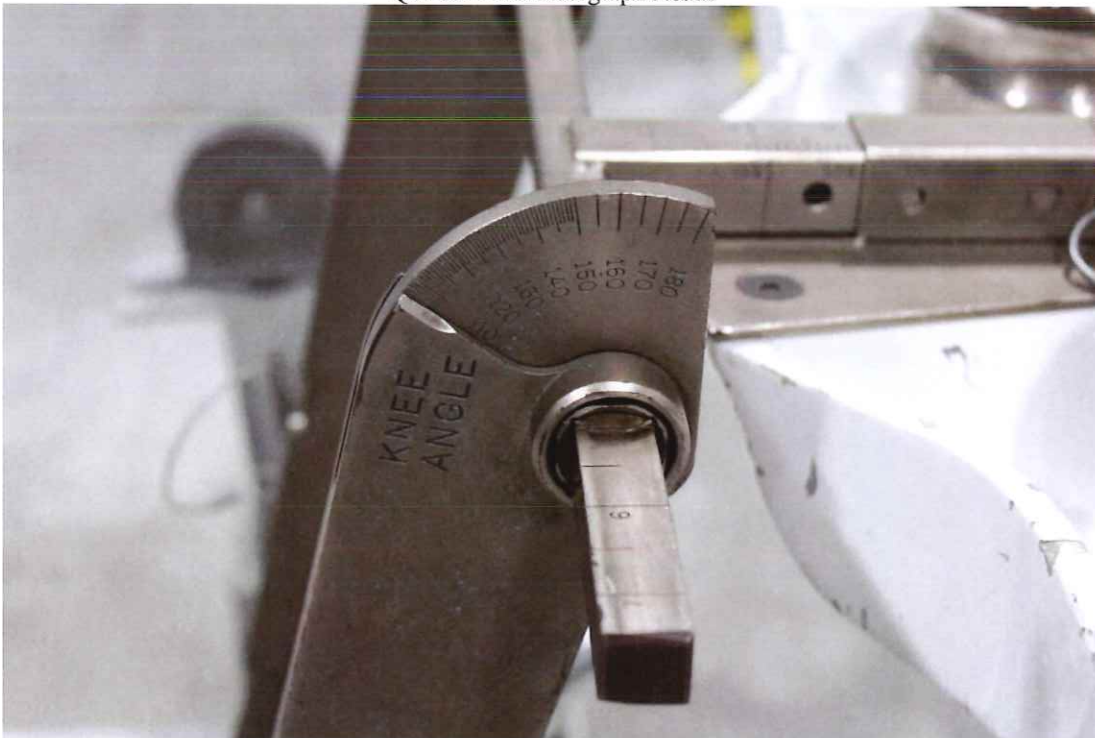
MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 20 of 29



Q21128 Test Photograph No.22



Q21128 Test Photograph No.23

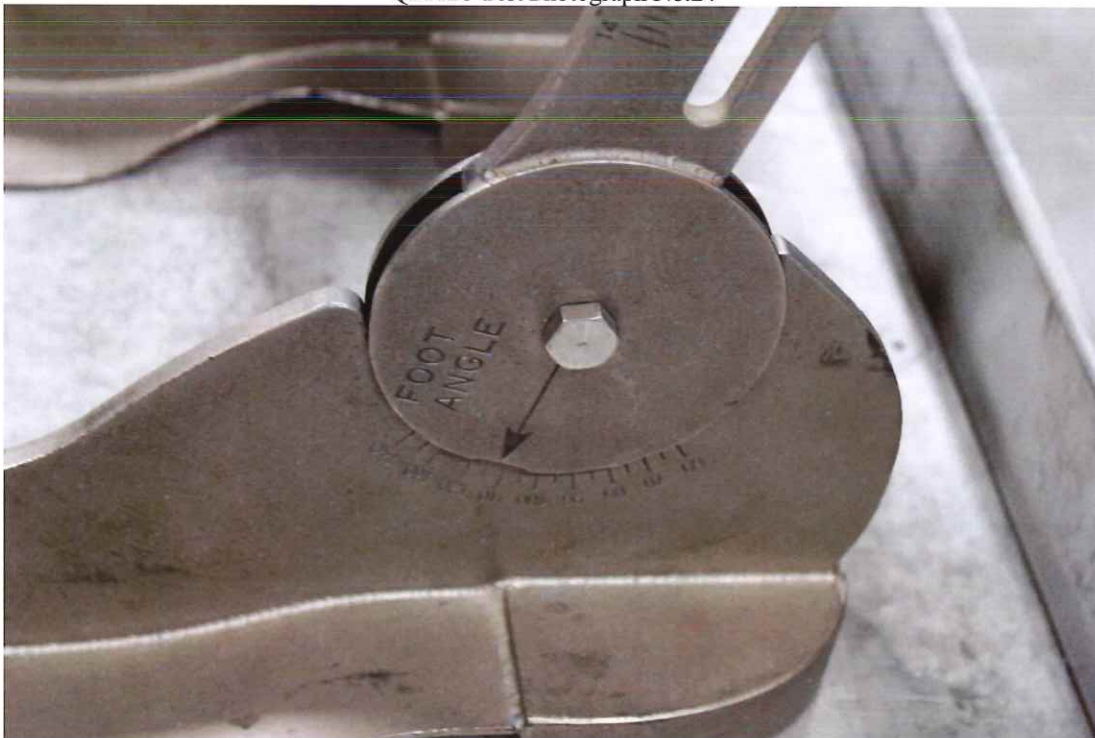
MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 21 of 29



Q21128 Test Photograph No.24

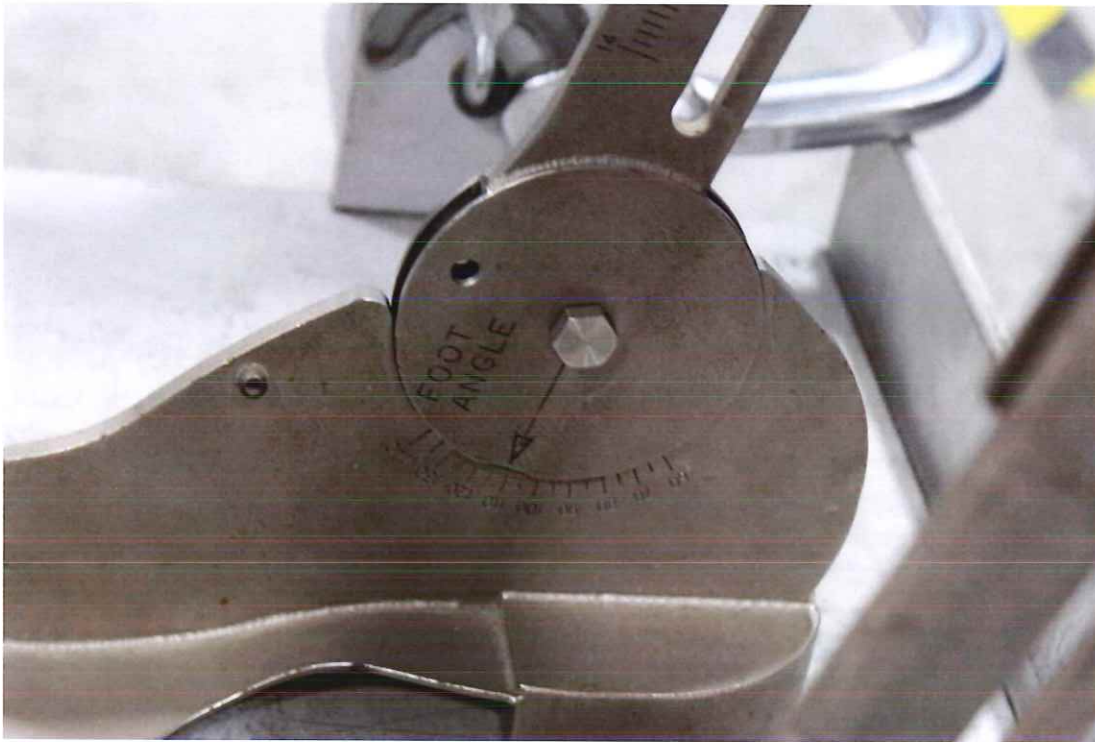


Q21128 Test Photograph No.25

MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 22 of 29



Q21128 Test Photograph No.26



Q21128 Test Photograph No.27

MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 23 of 29



Q21128 Test Photograph No.28



Q21128 Test Photograph No.29

MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 24 of 29



Q21128 Test Photograph No.30



Q21128 Test Photograph No.31

MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 25 of 29



Q21128 Test Photograph No.32

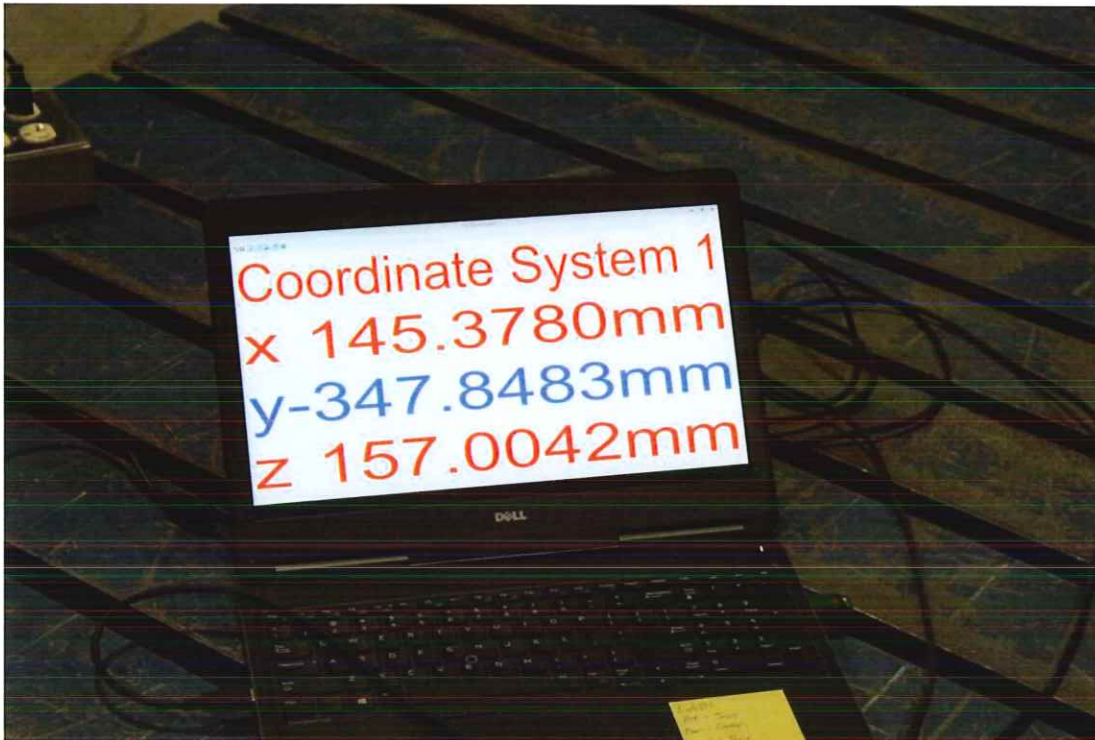


Q21128 Test Photograph No.33

MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 26 of 29



Q21128 Test Photograph No.34

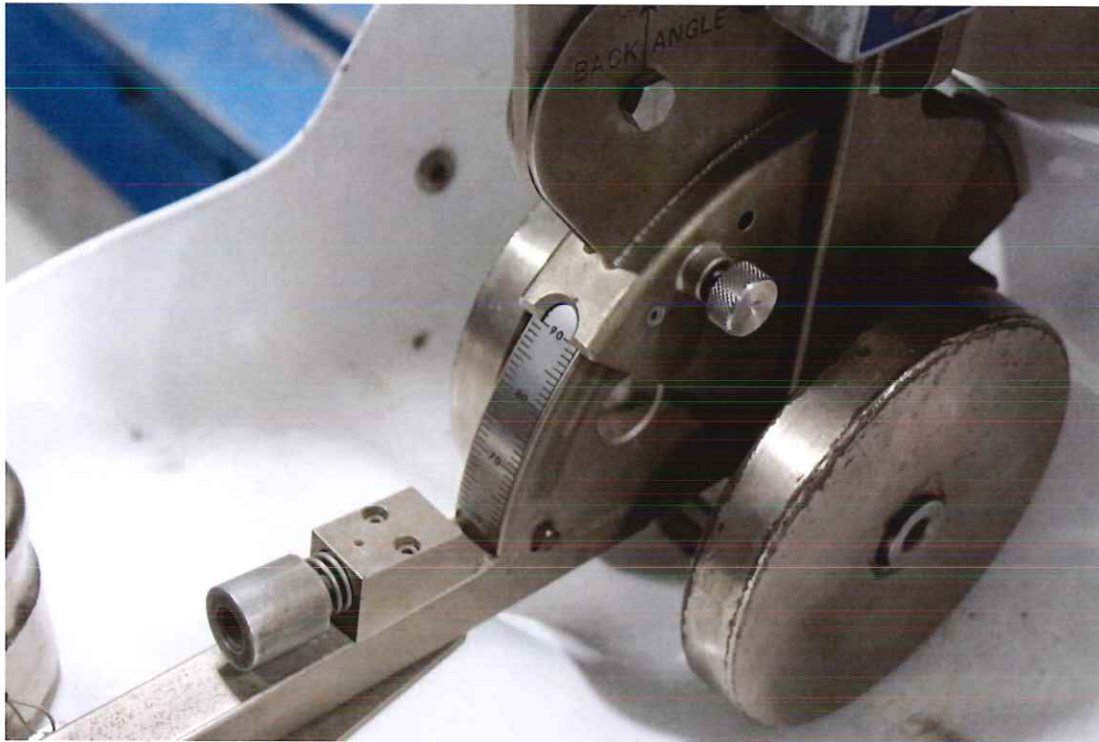


Q21128 Test Photograph No.35

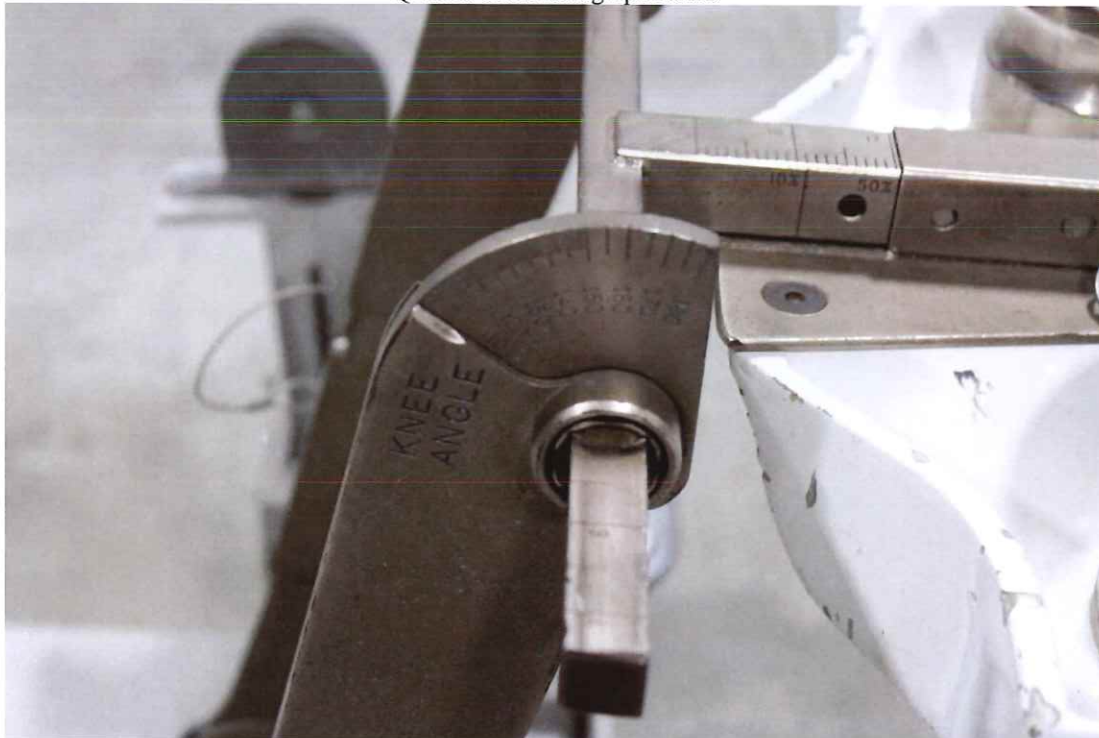
MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 27 of 29



Q21128 Test Photograph No.36



Q21128 Test Photograph No.37

MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 28 of 29



Q21128 Test Photograph No.38

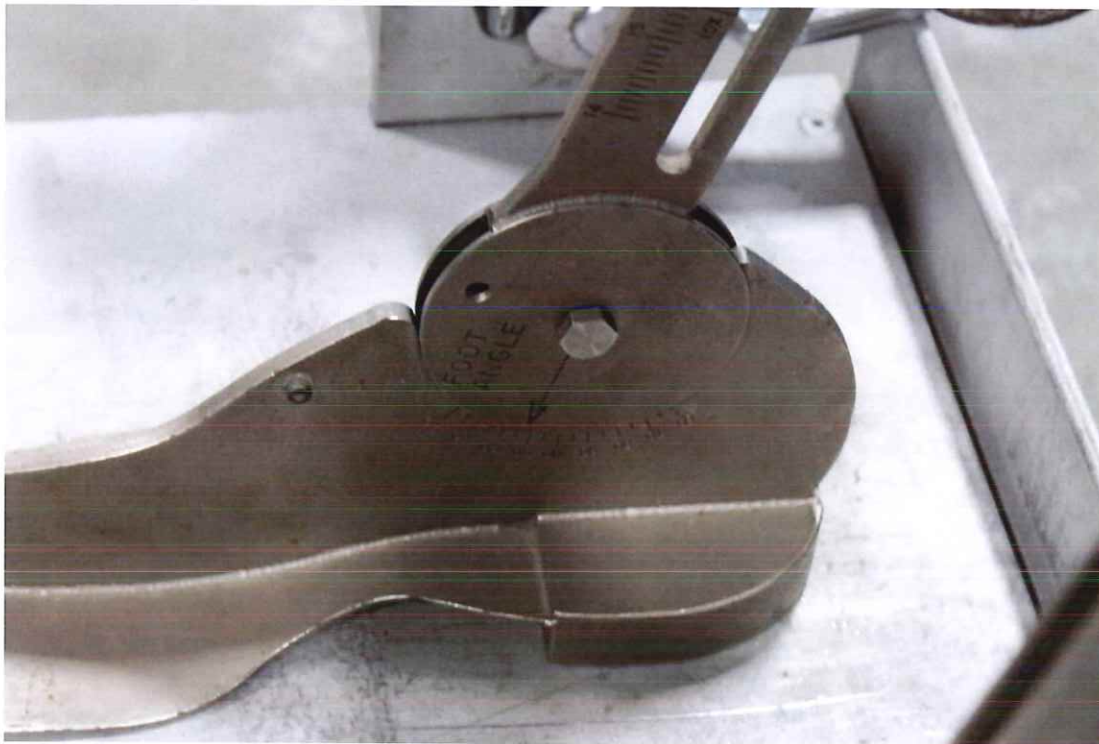


Q21128 Test Photograph No.39

MGA Report No.: C21Q9-004.5
Test Type: Dimensionals

Customer: Seats Incorporated
Program: Wall Mounted Seat

Page 29 of 29



Q21128 Test Photograph No.40



Q21128 Test Photograph No.41